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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,301	10/17/2001	Anders Vinberg	063170.6570	8005

5073 7590 07/19/2007

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ART UNIT	PAPER NUMBER
2154	

NOTIFICATION DATE	DELIVERY MODE
07/19/2007	ELECTRONIC

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

JUL 17 2007

Technology Center 2100

Application Number: 09/982,301
Filing Date: October 17, 2001
Appellant(s): VINBERG, ANDERS

Mr. Travis W. Thomas
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 02/28/2006 and 04/09/2007 appealing from the Office action mailed 07/25/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The statement of the status of claims contained in the brief is correct, except that the amendment after final rejection filed on 09/26/2005 has been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

Note: The Replacement Summary of Claimed Subject Matter, pages 4 and 5, of the appeal brief, dated 04/09/2007 contains very specific details regarding the broadly claimed subject matter of the claims (please refer to claims on appeal, pages 15-20, of the appeal brief, dated 02/28/2006).

The Replacement Summary of Claimed Subject Matter, pages 4 and 5, of the appeal brief, dated 04/09/2007 contains very specific details regarding **claim 1** as following:

A. levels of an industry-standard "stack"

B. an Open System Interconnection ("OSI") stack,

C. specifically the network 210, transport 212, and application 214 layers

D. Displaying separate links for specific layers of a stack enables the user to more accurately determine the state of the relationship between any two network nodes.

E. the individual links 218, 220 and 222 represent the specific protocols running on the various levels of the "stack" representation of the network, namely Internet Protocol ("IP"), Transmission Control Protocol ("TCP") and File Transfer Protocol ("FTP"), respectively.

F. In this alternative embodiment, the individual links 226 and 218 represent the different types of specific protocols running on a particular layer. Links 226 and 218 represent Hypertext Transfer Protocol ("HTTP") and FTP, respectively, both of which run in the application layer, **which is not what the claimed invention i.e. claimed subject matter of the claim 1 reflect and limited to.**

Since the Appellant indicates on page 6 of The Replacement Summary of Claimed Subject Matter, dated 04/09/2007, "Independent Claims 18, 20, and 22 are similar to independent Claim 1, the above is equally and essentially applicable to claims 18, 20, and 22.

The Replacement Summary of Claimed Subject Matter, page 4, line 2- page 5, line 3, of the appeal brief, dated 04/09/2007 contains very specific details regarding **claim 10** as following:

A. levels of an industry-standard "stack"

B. an Open System Interconnection ("OSI") stack,

C. specifically the network 210, transport 212, and application 214 layers

D. Displaying separate links for specific layers of a stack enables the user to more accurately determine the state of the relationship between any two network nodes.

E. the individual links 218, 220 and 222 represent the specific protocols running on the various levels of the "stack" representation of the network, namely Internet Protocol ("IP"), Transmission Control Protocol ("TCP") and File Transfer Protocol ("FTP"), respectively.

F. In this alternative embodiment, the individual links 226 and 218 represent the different types of specific protocols running on a particular layer. Links 226 and 218 represent Hypertext Transfer Protocol ("HTTP") and FTP, respectively, both of which run in the application layer, which **is not what the claimed invention i.e. claimed subject matter of the claim 10 reflect and limited to.**

Note: The dependent claims include the claimed subject matter of their respective independent claims.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US-5, 787, 252	Schettler et al.	07-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 10, and 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Schettler et al. (US Patent 5,787,252, issued 7/28/1998, hereinafter Schettler).

* * * * * * * * * * * * *

Claim Rejections - 35 USC §02

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 10, and 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Schettler et al. (US Patent 5,787,252, issued 7/28/1998, hereinafter Schettler).

5. As per claim 1, Schettler discloses a method for analyzing links between components of a computer system (col. 2, lines 20-27), comprising: receiving input associated with a level of abstraction; determining the level of abstraction based on the

input (col. 7, lines 19-35: user input describes filters based on level of detail specified); filtering network links for display based on the level of abstraction (col. 2, lines 35-40)., and displaying the filtered network links to present a layered network diagram (col. 2, lines 60-63).

6. As per claim 2, Schettler discloses the method of claim 1, wherein the input is a user identification (col. 11, lines 30-33).

7. As per claim 10, Schettler discloses a method for network analysis by presenting a layered network diagram on a visualization workstation (Fig. 1 item 100., col. 2, lines 20-28), comprising: storing in an object repository (Fig. 3. item 314; col. 6, lines 39-45), at least one object representing a link between components of a network (col. 6, line 42: objects include network segment); receiving a request to present the network topology represented by the at least one object in the object repository (col. 5, lines 43-47); receiving input associated with a level of abstraction (col. 7, lines 19-35: user input describes filters based on level of detail specified); determining the level of abstraction based on the input (col. 7, lines 19-35: user input describes filters based on level of detail specified); filtering the at least one object based on the level of abstraction (Fig. b, item 103 filters objects from object database; and displaying the at least one filtered objects to present a layered network diagram (col. 2, lines 60-63).

8. As per claim 18, Schettler discloses an apparatus for analyzing links between components of a computer system (col. 2, lines 20-27), comprising: a processor 102; a memory connected to said processor storing a program to control the operation of said processor 1 10 (Fig. 1)., the processor operative with the program in the memory to:

receive input associated with a level of abstraction; determine the level of abstraction based on the input (col. 7, lines 19-35: user input describes filters based on level of detail specified); filter network links for display based on, the level of abstraction (col. 2, lines 35-40); and display the filtered network links to present a layered network diagram (col. 2, lines 60-63).

9. As per claim 19, Schettler discloses an apparatus for network analysis by presenting a layered network diagram on a visualization workstation (Fig. 1 item 100., col. 2, lines 20-28), comprising: a processor 102., a memory connected to said processor storing a program to control the operation of said processor 1 10 (Fig. 1); the processor operative with the program in the memory to: store in an object repository (Fig. 3. item 314,* col. 6, lines 39-45), at least one object representing a link between components of a network (col. 6, line 42: stored objects include network segment); receive a request to present the network topology represented by the at least one object in the object repository (col. 5, lines 43-47),. receive input associated with a level of abstraction; determine the level of abstraction based on the input (col. 7, lines 19-35: user input describes filters based on level of detail specified); filter the at least one object based on the level of abstraction (Fig. 3, item 103 filters objects from object databaset); and display the at least one filtered objects to present a layered network diagram (col. 2, lines 60-63).

10. As per claims 20 and 21, claims 20 and 21 are rejected for the same reasons as claims 18 and 19 respectively.

11. As per claims 22 and 23, claims 22 and 23 are describe a computer product storing instructions that direct a computer to carry out the method in claims 1 and 10 respectively. Claims 22 and 23 are rejected for the same reasons as claims 1 and 10.

Claim Rejections - 35 USC §103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 4, 5, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schettler et al. (US Patent 5,787,252, hereinafter Schettler) further in view of Ball et al. (US Published Application 2003/0046390) hereinafter Ball.

14. As per claims 4 and 5, Schettler fails to explicitly teach the method of claim 1, wherein each displayed network link represents a layer of an industry standard stack selected from the group consisting of the layers of an Open System Interconnection (OSI) protocol stack.

Ball teaches displaying network links representing layers of an industry standard stack selected from the network and data link layers of the OSI protocol stack (Paragraphs 0041, 0067, and 0073: Fig. 2A).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Ball because they both deal with displaying links between components of a computer system. Furthermore, the teaching of Ball to modify the to the network link analyzer taught by Schettler so that displayed network links represent layers of an industry standard stack would increase the usefulness of the network display as an analysis and troubleshooting tool by providing a visual representation of the interdependencies among network layers (See Ball, paragraph 0044 and 0046).

15. As per claims 12 and 13, Schettler fails to explicitly teach the method of claim 10, wherein the displayed objects represent a layers of an industry standard stack selected from the group consisting of the layers of an Open System Interconnection (OSI) protocol stack.

Ball teaches displaying network links representing layers of an industry standard stack selected from the network and data link layers of the OSI protocol stack (Paragraphs 0041, 0067, and 0073; Fig. 2A).

It would have been obvious to one of ordinary skill in this ad at the time the invention was made to combine the teaching of Schettler and Ball because they both deal with displaying links between components of a computer system. Furthermore, the teaching of Ball to modify the to the network link analyzer taught by Schettler so that displayed objects represent layers of an industry standard stack would increase the usefulness of the network display as an analysis and troubleshooting tool by providing a

visual representation of the interdependencies among network layers (See Ball, paragraph 0044 and 0046).

16. Claims 3, 6-8, 11, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schettler et al. (US Patent 5,787,252, hereinafter Schettler) further in view of Tams et al. (US Published Application 2003/0069952, hereinafter Tams).

17. As per claim 3, Schettler fails to explicitly teach the method of claim 1, wherein the level of abstraction represents at least one protocol.

Tams teaches Tams teaches monitoring network data objects based on the protocol of the packet, the protocols being IP, TCP, FTP and HUP (Paragraph (0150) and Table 1) and turning off monitoring for non selected protocols (Paragraph 0158: turning of UDP monitoring).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Tams because they both deal with monitoring and analyzing links in a network using SNMP. Furthermore, the teaching of Tams to limit the level of abstraction to at least one protocol allows the user to reduce the display clutter due to information not of interest while allowing a detailed presentation of the protocols of interest thus increasing the utility of the display for diagnosing the network (See Tams, Paragraph 0071 and 0082).

18. As per claim 6 and 7, Schettler fails to explicitly teach the method of claim 1 where each network link represents a protocol selected from the group consisting of Internet Protocol (IP), Transmission Control Protocol (TCP), File Transfer Protocol (FTP) and Hypertext Transfer Protocol (HUP).

Tams teaches monitoring network data objects based on the protocol of the packet, the protocols being IP, TCP, FTP and HUP (Paragraph (0150) and Table 1) and turning off monitoring for non selected protocols (Paragraph 0158).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Tams because they both deal with monitoring and analyzing links in a network using SNMP. Furthermore, the teaching of Tams to modify the network analyzing method taught by Schettler to have each network link represent a protocol selected from the group consisting of Internet Protocol (IP), Transmission Control Protocol (TCP), File Transfer Protocol (FTP) and Hypertext Transfer Protocol (HTTP) allows the user to reduce the display of information not of interest while allowing a detailed presentation of the protocols of interest thus increasing the utility of the display for diagnosing the network (See Tams, Paragraph 0071 and 0082).

19. As per claim 8, Schettler fails to explicitly teach the method of claim 1, wherein filtering includes identifying any network link that represents a relevant propagated failure regardless of the level of abstraction.

Tams teaches identifying network link failures by processing multiple protocol layers regardless of which layers are currently being displayed (Paragraph 150).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Tams to identify a relevant propagated failure regardless of the level of abstraction because they both deal with monitoring and analyzing links in a network using SNMP. Furthermore, the

teaching of Tams to modify the network analyzer taught by Schettler to identify failures regardless of the selected level of abstraction would increase the usefulness of the display to identify faults by not hiding them when a layer is not chosen for display.

20. As per claim 11, Schettler fails to explicitly teach the method of claim 10, wherein the level of abstraction limits the presentation to at least one protocol.

Tams teaches Tams teaches monitoring network data objects based on the protocol of the packet, the protocols being IP, TCP, FTP and HUP (Paragraph (0150) and Table 1) and turning off monitoring for non selected protocols (Paragraph 0158: turning of UDP monitoring).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Tams because they both deal with monitoring and analyzing links in a network using SNMP. Furthermore, the teaching of Tams to limit the level of abstraction to at least one protocol allows the user to reduce the display clutter due to information not of interest while allowing a detailed presentation of the protocols of interest thus increasing the utility of the display for diagnosing the network (See Tams, Paragraph 0071 and 0082).

21. As per claim 14 and 15, Schettler fails to explicitly teach the method of claim 10, wherein each displayed object represents a protocol, wherein the protocol is selected from the group consisting of Internet Protocol (IP), Transmission Control Protocol (TCP), File Transfer Protocol (FTP) and Hypertext Transfer Protocol (HUP).

Tams teaches monitoring network data objects based on the protocol of the packet, the protocols being IP, TCP, FTP and HUP (Paragraph (0150) and Table 1) and turning off monitoring for non selected protocols (Paragraph 0158).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Tams because they both deal with monitoring and analyzing links in a network using SNMP. Furthermore, the teaching of Tams to modify the network analyzing method taught by Schettler to have each displayed object represent a protocol selected from the group consisting of Internet Protocol (IP), Transmission Control Protocol (TCP), File Transfer Protocol (FTP) and Hypertext Transfer Protocol (HTTP) allows the user to reduce the display of information not of interest while allowing a detailed presentation of the protocols of interest thus increasing the utility of the display for diagnosing the network (See Tams, Paragraph 0071 and 0082).

22. As per claim 16, Schettler fails to explicitly teach the method of claim 10, wherein filtering includes identifying any object that represents a relevant propagated failure regardless of the level of abstraction.

Tams teaches identifying network link failures by processing multiple protocol layers regardless of which layers are currently being displayed (Paragraph 150).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Tams to identify a relevant propagated failure regardless of the level of abstraction because they both deal with monitoring and analyzing links in a network using SNMP. Furthermore, the

teaching of Tams to modify the network analyzer taught by Schettler to identify objects representing failures regardless of the selected level of abstraction would increase the usefulness of the display to identify faults by not hiding them when a layer is not chosen for display.

23. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schettler et al. (US Patent 5,787,252 hereinafter Schettler) in view of Miyake et al. (US Patent 6,732,170, hereinafter Miyake).

24. As per claim 9, Schettler fails to explicitly teach the method of claim 1, wherein displaying includes displaying a three dimensional representation of the link.

Miyake teaches providing a three dimensional representation of the links in a physical network (Abstract; Fig, 14, col. 13, lines 1-10).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Miyake because they both deal with a display for analyzing network entities. Furthermore, the teaching of Miyake to modify the network analyzer taught by Schettler to displaying a three dimensional representation of the link would increase the usefulness of the display by visually showing the relationships between the protocol layers of a connection in a compact diagram (See Miyake col. 13, lines 21-27).

25. As per claim 17, Schettler fails to explicitly teach the method of claim 10, wherein displaying includes displaying a three dimensional representation of the at least one object.

Miyake teaches providing a three dimensional representation of objects representing network topological entities (Abstract; Fig, 14, col. 13, lines 1-10).

It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Schettler and Miyake because they both deal with a display for analyzing network entities. Furthermore, the teaching of Miyake to modify the network analyzer taught by Schettler to displaying a three dimensional representation of at least one object would increase the usefulness of the display by visually showing the relationships between the protocol layers of a connection in a compact diagram (See Miyake col. 13, lines 21-27).

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

* * * * * * * * * * * * *

(10) Response to Arguments

Independent Claims 1, 18, 20, and 22 are Allowable over Schettler

<u>Appellant's argument:</u>

"As Appellant further discussed in the Response mailed September 26, 2005, Schettler fails to disclose, teach, or suggest ***filtering network links for display based on the level of abstraction,*** as recited in" independent Claim 1. The filtering system in schettler filters objects out of network topology data only by type. Therefore, even assuming for the sake of argument that objects in Schettler could be properly considered ***network links***, as recited in independent Claim 1, Schettler would still fail to disclose, teach, or suggest filtering any such objects ***based on the level of abstraction***, as recited in independent Claim 1. Moreover, because Schettler fails to disclose, teach, or suggest ***filtering network links for display based on the level of abstraction***, as recited in independent Claim 1, Schettler also necessarily fails to disclose, teach, or suggest ***displaying the filtered network links to present a layered network diagram***, as further recited in independent Claim 1."

"Independent Claims 18, 20, and 22 are similar to independent Claim 1, and Schettler similarly fails to disclose, teach, or suggest each and every limitation recited in independent Claims 18, 20, and 22, respectively."

Examiner's response:

It should be noted that "It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064.

Also should be noted is that "claims are to be given their broadest reasonable interpretation during prosecution, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See In re Morris, 127 F.3d 1048, 1054, 44

USPQ2D 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2D 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ 541,550 (CCPA 1969). In addition, the law of anticipation does not require that a reference "teach" what an appellant's disclosure teaches. Assuming that reference is properly "prior art,'" it is only necessary that the claims "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781,789 (Fed. Cir. 1983).

And as such, Examiner would like to present the teachings of Schettler in details establishing it's anticipation to the claim as follows:

Claim 1 recites:

A method for analyzing links between components of a computer system

(Schettler teaches at col. 2, lines 20-27, "Briefly described, the present invention is a filtering system and method for a management station for customizing the contents of a network management map. The system comprises a processor which executes the instructions provided by the various software elements of the system a memory for storing the various software elements, a display for showing the devices and interconnections of the network, an interface that interconnects the foregoing elements and the network, a discovery mechanism for determining the network topology data, a layout mechanism for converting the network topology data to map data and for driving the display with the map data, and a filtering system, which is a significant feature of the present invention as will be further described immediately hereafter."

As stated above by Schettler, **"filtering" and "customizing" of "the contents of a network management map" done by "the instructions provided by the various software elements of the system " which is <u>"A method for analyzing</u>", and "showing the devices and interconnections of the network, an interface that interconnects the foregoing elements and the network" are "<u>links between components of a computer system</u>"), comprising:**

<u>receiving input associated with a level of abstraction</u>

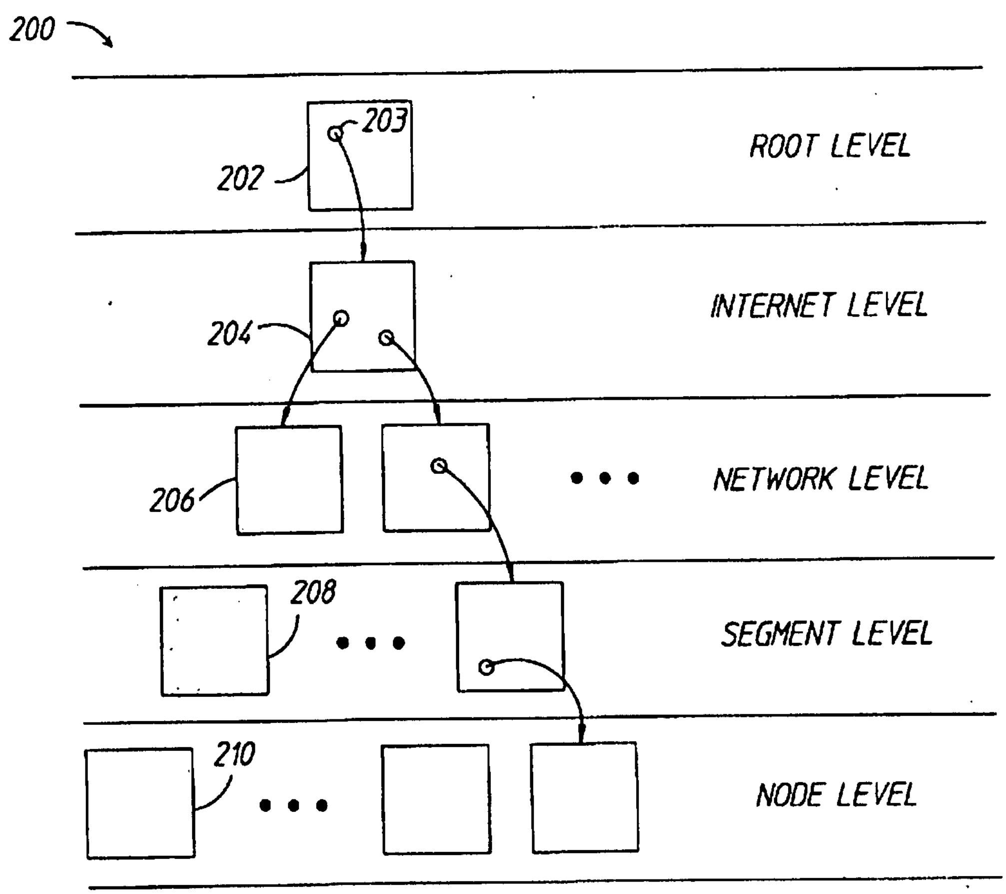

FIG 2

In reference to Fig. 2 above, Schettler teaches at col. 5, line 12-42, "FIG. 2 shows a network management map 200 which is generated by the discovery/layout software 101 from topology data discovered from the network 118. The

discovery/layout software 101 can drive any of the various submaps to the display 108 (FIG. 1) for viewing by the user **(Note: User is "input" provider).**

The submaps in the map 200 of FIG. 2 are arranged in a hierarchy. A root submap 202 is defined at a root level. The root submap 202 represents the highest logical level submap in the hierarchy and shows objects 203 acting as anchor points for different submap hierarchies. Each hierarchy is a separate management domain. This could be, for instance, a network, logical grouping of nodes, or some other domain. An internet submap 204 is defined at an internet level and is generated by "exploding" an object 203 within the root submap 202. "Exploding" in the context of this document means that the user prompts the management station 100 with the input device 106 to break down and provide more data pertaining to the object 203 at issue. Further, the internet submap 204 illustrates objects 203 in the form of networks and routers. Any one of a number of network submaps 206 can be exploded from the internet submap 204. Each network submap 206 shows objects 203 in the form of segments and connectors. Any one of a number of segment submaps 208 can be exploded from an object 203 within a network submap 206. Each segment submap 208 shows objects in the form of network nodes. Finally, any one of a number of node submaps 210 can be exploded from an object 203 within a segment submap 208. Each node submap 210 shows objects 203 in the form of interfaces within that node."**(Note: "Exploding" provides "association with a level of detail, that is abstraction. And thus "receiving input associated with a level of abstraction" is understood.);**

determining the level of abstraction based on the input

(Schettler teaches at col. 7, lines 19-35, "The filtering system 103 receives topology data from the topology manager 310 as indicated by arrow 320b', filters the topology data, and passes the processed data to the layout mechanism 304, as shown by arrow 320b". The filtering system 103 maintains a filtering library 321, which specifies which objects within the topology data are to be communicated from the discovery mechanism 302 to the layout mechanism 304. <u>In essence, the library determines whether objects are allowable objects or nonallowable objects. Moreover, allowable objects are ultimately converted into map data and displayed, whereas nonallowable objects are not converted into map data and are not displayed.</u>" **(Note: Filter system provides for "determining the level of abstraction based on the input wherein user input describes filters based on level of detail specified, that is level of abstraction.)**;

<u>filtering network links for display based on the level of abstraction</u>

(Schettler teaches at col. 2, lines 35-40, "The filtering system can be situated in <u>one or more of three</u> possible locations in the management station. First, the filtering system can be situated between the discovery mechanism and the layout mechanism so that the filtering system filters objects within the topology data that pass from the discovery mechanism to the layout mechanism. Second, the filtering system can also be situated between the layout mechanism and the network so that the filtering system filters objects within the topology data that pass from the network to the discovery mechanism. Third, the filtering system can also be situated between discovery mechanisms so that the filtering system filters objects within the topology data that

passes between the discovery mechanisms." And as stated at col. 7, lines 19-35, "The filtering system 103 receives topology data from the topology manager 310 as indicated by arrow 320b', filters the topology data, and passes the processed data to the layout mechanism 304, as shown by arrow 320b". The filtering system 103 maintains a filtering library 321, which specifies which objects within the topology data are to be communicated from the discovery mechanism 302 to the layout mechanism 304. In essence, the library determines whether objects are allowable objects or nonallowable objects. **Note: Schettler clearly elucidates that the filtering dictates which objects within the topology data are to be communicated from the discovery mechanism to the layout mechanism and** "Exploding" meaning "to break down and provide more data pertaining to the object at issue" . Thus, **<u>filtering network links for display based on the level of abstraction</u> is understood**); and

<u>**displaying the filtered network links to present a layered network diagram**</u>

(Schettler teaches at col. 5, line 18-27, "The submaps in the map 200 of FIG. 2 are arranged in a hierarchy. A root submap 202 is defined at a root level. The root submap 202 represents the highest logical level submap in the hierarchy and shows objects 203 acting as anchor points for different submap hierarchies. Each hierarchy is a separate management domain. This could be, for instance, a network, logical grouping of nodes, or some other domain. An internet submap 204 is defined at an internet level and is generated by "exploding" an object 203 within the root submap 202." **Note: Hierarchical logical level arrangement of "a network, logical grouping of nodes, or some other domain" is a layered network diagram.**

Schettler teaches at col. 2, lines 60-63, "Another advantage of the filtering system and method is that they customize the contents of a network management map generated by a management station so as to reduce clutter of objects in submaps." **(Note: "to reduce clutter of objects in submaps" by applying "the filtering system" is "filtered network links". And thus, <u>displaying the filtered network links to present a layered network diagram</u> is understood.)**

And since the Appellant has stated that "Independent Claims 18, 20, and 22 are similar to independent Claim 1", Schettler's teachings as stated above is applicable to the independent Claims 18, 20, and 22 as well.

Independent Claims 10, 19, 21, and 23 are Allowable Over Schettler

<u>Appellant's argument:</u>

"As Appellant discussed in the Response mailed September 26, 2005, Schettler fails to disclose, teach, or suggest filtering the at least one object based on the level of abstraction, as recited in independent Claim 10. The filtering system in Schettler filters objects out of network topology data only by type. Therefore, even assuming for the sake of argument that objects in Schettler could be properly considered the at least one object, as recited in independent Claim 10, Schettler would still fail to disclose, teach, or suggest filtering any such objects based on the level of abstraction, as recited in independent Claim 10. Moreover, Because Schettler fails to disclose, teach, or suggest filtering the at least one object based on the level of abstraction, as recited in independent Claim 10, Schettler also necessarily fails to disclose, teach, or suggest

displaying the at least one filtered object to present a layered network diagram, as further recited in independent Claim 10."

"However, the Examiner's discussion of Schettler fails to demonstrate that the network management map in Schettler or "exploding" an object in the map discloses, teaches, or suggests filtering the at least one object based on the level of abstraction, as recited in independent Claim 10. Instead, the layout mechanism in Schettler relies on the hierarchical structure of the network management map in Schettler and the ability of a user to "explode" an object in the map to display more data, which tends to teach away from filtering the at least one object based on the level of abstraction, as recited in independent Claim 10."

"Independent Claims 19, 21, and 23 are similar to independent Claim 10, and Schettler similarly fails to disclose, teach, or suggest each and every limitation recited in independent Claims 19, 21, and 23, respectively."

Examiner's response:

It should be noted that "It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064.

Also should be noted is that "claims are to be given their broadest reasonable interpretation during prosecution, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2D 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2D 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ 541,550

(CCPA 1969). In addition, the law of anticipation does not require that a reference "teach" what an appellant's disclosure teaches. Assuming that reference is properly "prior art,'" it is only necessary that the claims "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781,789 (Fed. Cir. 1983).

And as such, Examiner would like to present the teachings of Schettler in details establishing it's anticipation to the claim as follows:

Claim 10 recites:

A method for network analysis by presenting a layered network diagram on a visualization workstation

(Schettler teaches at col. 2, lines 20-27, "Briefly described, the present invention is a filtering system and method for a management station for customizing the contents of a network management map. The system comprises a processor which executes the instructions provided by the various software elements of the system a memory for storing the various software elements, a display for showing the devices and interconnections of the network, an interface that interconnects the foregoing elements and the network, a discovery mechanism for determining the network topology data, a layout mechanism for converting the network topology data to map data and for driving the display with the map data, and a filtering system, which is a significant feature of the present invention as will be further described immediately hereafter."

As stated above by Schettler, **"filtering" and "customizing" of "the contents of a network management map" done by "the instructions provided by the various software elements of the system " which is "<u>A method for network analysis</u>", and "showing the devices and interconnections of the network, an interface that interconnects the foregoing elements and the network" are "<u>presenting a network diagram on a visualization workstation</u>".**

Schettler teaches at col. 5, line 18-27, "The submaps in the map 200 of FIG. 2 are arranged in a hierarchy. A root submap 202 is defined at a root level. The root submap 202 represents the highest logical level submap in the hierarchy and shows objects 203 acting as anchor points for different submap hierarchies. Each hierarchy is a separate management domain. This could be, for instance, a network, logical grouping of nodes, or some other domain. An internet submap 204 is defined at an internet level and is generated by "exploding" an object 203 within the root submap 202." **Note: Hierarchical logical level arrangement of "a network, logical grouping of nodes, or some other domain" is a layered network diagram.**

Thus, "**<u>A method for network analysis by presenting a layered network diagram on a visualization workstation"</u>** is understood.), comprising:

<u>storing in an object repository</u>

(In reference to Fig. 3, element 314, which is "TOPOLOGY DATABASE", Schettler teaches at col. 6, line 39-45, "The <u>topology data base 314 stores topology data based upon objects</u>, which are used to partition the network for logical reasons. Objects include, for example but not limited to, a network, a segment, a computer, a

router, a repeater, a bridge, etc. Moreover, the topology data stored with respect to the objects includes, for example but not limited to, an interface or device address, an interface or device type, an interface or device manufacturer, and whether an interface or device supports the SNMP. "

Note: Here Schettler clearly reveals and elucidates the claim limitation.),

at least one object representing a link between components of a network ;

(In reference to Fig. 3, element 314, which is "TOPOLOGY DATABASE", Schettler teaches at col. 6, line 39-45, "The topology data base 314 stores topology data based upon objects, which are used to partition the network for logical reasons. Objects include, for example but not limited to, a network, a segment, a computer, a router, a repeater, a bridge, etc. Moreover, the topology data stored with respect to the objects includes, for example but not limited to, an interface or device address, an interface or device type, an interface or device manufacturer, and whether an interface or device supports the SNMP."

Schettler substantiates "a network" and "a segment" at col. 5, line 30-38, "Further, the internet submap 204 illustrates objects 203 in the form of networks and routers. Any one of a number of network submaps 206 can be exploded from the internet submap 204. Each network submap 206 shows objects 203 in the form of segments and connectors. Any one of a number of segment submaps 208 can be exploded from an object 203 within a network submap 206. Each segment submap 208 shows objects in the form of network nodes."

Note: Here Schettler clearly reveals and elucidates that "the objects include <u>" a network" including " a segment" of network,</u> i.e.<u> at least one object representing a link between components of a network.)</u>;

<u>receiving a request to present the network topology represented by the at least one object in the object repository;</u>

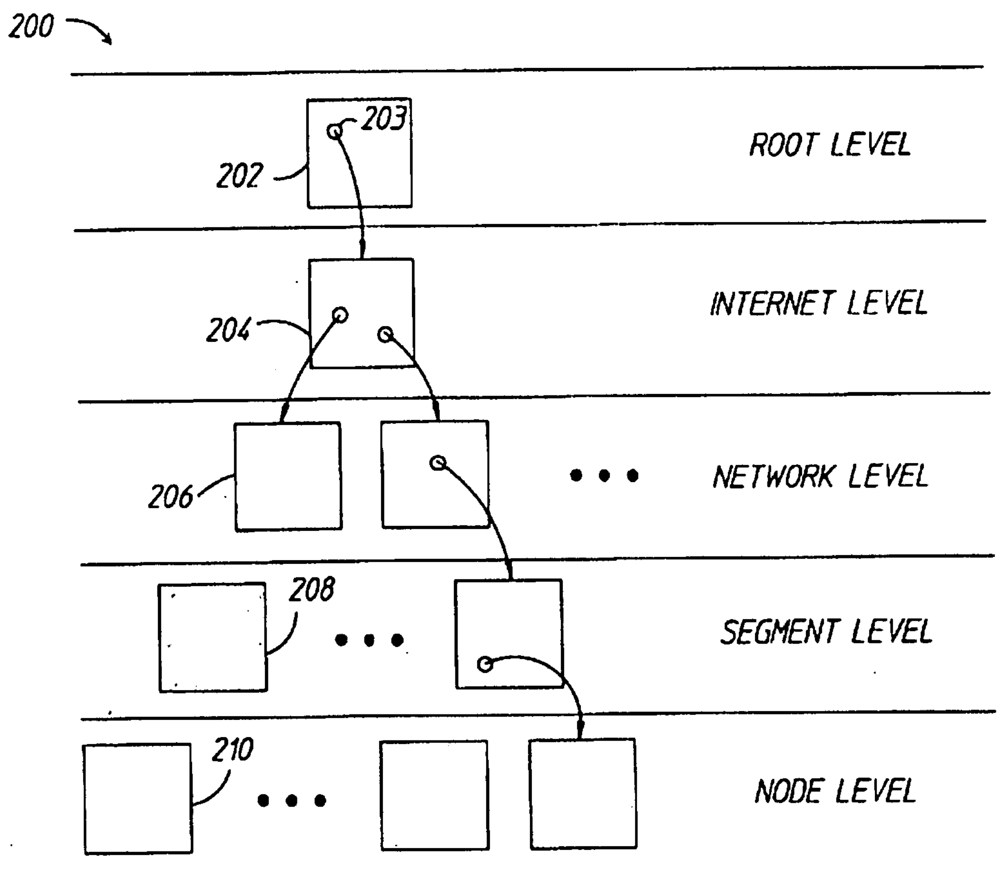

FIG 2

In reference to Fig. 2 above, Schettler teaches at col. 5, line 12-42, "FIG. 2 shows a network management map 200 which is generated by the discovery/layout software 101 from topology data discovered from the network 118. The discovery/layout software 101 can drive any of the various submaps to the display 108

(FIG. 1) for viewing by the user **(Note: Thus, "receiving a request to present the network topology" is understood.).**

Schettler teaches at col. 5, line 43-55, "In the preferred embodiment, although not necessary to practice the present invention, the discovery/layout software 101 implements on-demand submaps in order to save memory and processing time. The concept of on-demand submaps is to only place those submaps in the map 200 of FIG. 2 which the user wants to see. The net result is that only a portion of the submap hierarchy is in the network management map 200 at a given time. In FIG. 2, submaps (nonresident) which are not present, but would be created upon prompting by the user, are indicated by hatching. The resident submap subset of the hierarchy will change over time as the user traverses the submap hierarchy and causes nonresident submaps to be created."

Note: Thus, **"receiving a request to present the network topology represented by the at least one object in the object repository" is understood.)**

receiving input associated with a level of abstraction;

In reference to Fig. 2 above, Schettler teaches at col. 5, line 12-42, "FIG. 2 shows a network management map 200 which is generated by the discovery/layout software 101 from topology data discovered from the network 118. The discovery/layout software 101 can drive any of the various submaps to the display 108 (FIG. 1) for viewing by the user **(Note: User is "input" provider).**

The submaps in the map 200 of FIG. 2 are arranged in a hierarchy. A root submap 202 is defined at a root level. The root submap 202 represents the highest

logical level submap in the hierarchy and shows objects 203 acting as anchor points for different submap hierarchies. Each hierarchy is a separate management domain. This could be, for instance, a network, logical grouping of nodes, or some other domain. An internet submap 204 is defined at an internet level and is generated by "exploding" an object 203 within the root submap 202. "Exploding" in the context of this document means that the user prompts the management station 100 with the input device 106 to break down and provide more data pertaining to the object 203 at issue. Further, the internet submap 204 illustrates objects 203 in the form of networks and routers. Any one of a number of network submaps 206 can be exploded from the internet submap 204. Each network submap 206 shows objects 203 in the form of segments and connectors. Any one of a number of segment submaps 208 can be exploded from an object 203 within a network submap 206. Each segment submap 208 shows objects in the form of network nodes. Finally, any one of a number of node submaps 210 can be exploded from an object 203 within a segment submap 208. Each node submap 210 shows objects 203 in the form of interfaces within that node."**(Note: "Exploding" provides "association with a level of detail, that is abstraction. And thus "receiving input associated with a level of abstraction" is understood.);**

determining the level of abstraction based on the input;

(Schettler teaches at col. 7, lines 19-35, "The filtering system 103 receives topology data from the topology manager 310 as indicated by arrow 320b', filters the topology data, and passes the processed data to the layout mechanism 304, as shown by arrow 320b". The filtering system 103 maintains a filtering library 321, which

specifies which objects within the topology data are to be communicated from the discovery mechanism 302 to the layout mechanism 304. In essence, the library determines whether objects are allowable objects or nonallowable objects. Moreover, allowable objects are ultimately converted into map data and displayed, whereas nonallowable objects are not converted into map data and are not displayed." **(Note: Filter system provides for "determining the level of abstraction based on the input wherein user input describes filters based on level of detail specified, that is level of abstraction.)**;

filtering the at least one object based on the level of abstraction; and

(Schettler teaches at col. 2, lines 35-40, "The filtering system can be situated in one or more of three possible locations in the management station. First, the filtering system can be situated between the discovery mechanism and the layout mechanism so that the filtering system filters objects within the topology data that pass from the discovery mechanism to the layout mechanism. Second, the filtering system can also be situated between the layout mechanism and the network so that the filtering system filters objects within the topology data that pass from the network to the discovery mechanism. Third, the filtering system can also be situated between discovery mechanisms so that the filtering system filters objects within the topology data that passes between the discovery mechanisms." And as stated at col. 7, lines 19-35, "The filtering system 103 receives topology data from the topology manager 310 as indicated by arrow 320b', filters the topology data, and passes the processed data to the layout mechanism 304, as shown by arrow 320b". The filtering system 103 maintains a

filtering library 321, which specifies which objects within the topology data are to be communicated from the discovery mechanism 302 to the layout mechanism 304. In essence, the library determines whether objects are allowable objects or nonallowable objects. **Note: Schettler clearly elucidates that the filtering dictates which objects within the topology data are to be communicated from the discovery mechanism to the layout mechanism and** "Exploding" meaning "to break down and provide more data pertaining to the object at issue" . Thus, **filtering the at least one object for display based on the level of abstraction is understood**); and

displaying the at least one filtered object to present a layered network diagram

(Schettler teaches at col. 5, line 18-27, "The submaps in the map 200 of FIG. 2 are arranged in a hierarchy. A root submap 202 is defined at a root level. The root submap 202 represents the highest logical level submap in the hierarchy and shows objects 203 acting as anchor points for different submap hierarchies. Each hierarchy is a separate management domain. This could be, for instance, a network, logical grouping of nodes, or some other domain. An internet submap 204 is defined at an internet level and is generated by "exploding" an object 203 within the root submap 202." **Note: Hierarchical logical level arrangement of "a network, logical grouping of nodes, or some other domain" is a layered network diagram.**

Schettler teaches at col. 2, lines 60-63, "Another advantage of the filtering system and method is that they customize the contents of a network management map generated by a management station so as to reduce clutter of objects in submaps."

(Note: "to reduce clutter of objects in submaps" by applying "the filtering system" is "the at least one filtered object". And thus, displaying the at least one filtered object to present a layered network diagram is understood.)

And since the Appellant has stated that "Independent Claims 19, 21 and 23 are similar to independent Claim 10", Schettler's teachings as stated above is applicable to the independent Claims 19, 21 and 23 as well.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the Examiner in the Related Appeals and Interferences section of this Examiner's answer.

For the above reasons, it is believed that the rejections should be sustained. (Note: the Examiner has made an earnest effort to properly address each and eve~ Appellant's arguments of the appeal brief. In any event or reason if more explanation is needed, the Examiner will gladly provide as necessary).

Respectfully submitted,

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
09982301	10/17/2001	VINBERG, ANDERS	063170.6570

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Commissioner for Patents

The IDS dated 02/01/2007, 01/25/2007, 11/29/2006, 09/21/2006, 08/04/2006 and 07/28/2006 are considered by the Examiner as of June 22,, 2007.